

# FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO  
Texas Medical Center Central Heating and Cooling Services Corporation

AUTHORIZING THE OPERATION OF  
Central Plant  
Steam and Air-Conditioning Supply

LOCATED AT  
Harris County, Texas  
Latitude 29° 42' 12" Longitude 95° 23' 54"  
Regulated Entity Number: RN100210798

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: 01288 Issuance Date: \_\_\_\_\_

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For the Commission

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## **General Terms and Conditions**

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

## **Special Terms and Conditions:**

### **Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting**

1. Permit holder shall comply with the following requirements:
  - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
  - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
  - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

- D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
- E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
- F. For the purpose of generating emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 1 (Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
  - (i) Title 30 TAC § 101.302 (relating to General Provisions)
  - (ii) Title 30 TAC § 101.303 (relating to Emission Reduction Credit Generation Certification)
  - (iii) Title 30 TAC § 101.304 (relating to Mobile Emission Reduction Credit Generation and Certification)
  - (iv) Title 30 TAC § 101.309 (relating to Emission Credit Banking and Trading)
  - (v) The terms and conditions by which the emission limits are established to generate the reduction credit are applicable requirements of this permit
- G. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 3 (Mass Emission Cap and Trade Program) Requirements:
  - (i) Title 30 TAC § 101.352 (relating to General Provisions)
  - (ii) Title 30 TAC § 101.353 (relating to Allocation of Allowances)
  - (iii) Title 30 TAC § 101.354 (relating to Allowance Deductions)
  - (iv) Title 30 TAC § 101.356 (relating to Allowance Banking and Trading)
  - (v) Title 30 TAC § 101.358 (relating to Emission Monitoring and Compliance Demonstration)
  - (vi) Title 30 TAC § 101.359 (relating to Reporting)
  - (vii) Title 30 TAC § 101.360 (relating to Level of Activity Certification)
  - (viii) The terms and conditions by which the emission limits are established to meet or exceed the cap are applicable requirements of this permit
- H. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
  - (i) Title 30 TAC § 101.372 (relating to General Provisions)

- (ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)
  - (iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)
  - (iv) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)
  - (v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit
- 2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
  - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
  - B. Title 30 TAC § 101.3 (relating to Circumvention)
  - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
  - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
  - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
  - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
  - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
  - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
  - I. Title 30 TAC § 101.222 (relating to Demonstrations)
  - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
- 3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
  - A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed either before or after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1 , shall not exceed 20% opacity averaged over a six minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
    - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
    - (ii) Title 30 TAC § 111.111(a)(1)(E)

- (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
- (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
  - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
  - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
  - (3) Records of all observations shall be maintained.
  - (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer’s eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to

condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
- (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
  - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure

containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.

- (2) Records of all observations shall be maintained.
- (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (4) Compliance Certification:
  - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)
  - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.



- C. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- D. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- E. Permit holders for sites that have materials handling, construction, roads, streets, alleys, and parking lots shall comply with the following requirements:
  - (i) Title 30 TAC § 111.143 (relating to Materials Handling)
  - (ii) Title 30 TAC § 111.145 (relating to Construction and Demolition)
  - (iii) Title 30 TAC § 111.147 (relating to Roads, Streets, and Alleys)
  - (iv) Title 30 TAC § 111.149 (relating to Parking Lots)
- F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
  - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
  - (ii) Sources with an effective stack height ( $h_e$ ) less than the standard effective stack height ( $H_e$ ), must reduce the allowable emission level by multiplying it by  $[h_e/H_e]^2$  as required in 30 TAC § 111.151(b)
  - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- 4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: Storage of Volatile Organic Compounds, the permit holder shall comply with the requirements of 30 TAC § 115.112(e)(1).
- 5. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
  - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
  - B. Title 40 CFR § 60.8 (relating to Performance Tests)
  - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
  - D. Title 40 CFR § 60.12 (relating to Circumvention)
  - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
  - F. Title 40 CFR § 60.14 (relating to Modification)
  - G. Title 40 CFR § 60.15 (relating to Reconstruction)

- H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
- 6. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
- 7. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

#### **Additional Monitoring Requirements**

- 8. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

#### **New Source Review Authorization Requirements**

- 9. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
  - A. Are incorporated by reference into this permit as applicable requirements
  - B. Shall be located with this operating permit
  - C. Are not eligible for a permit shield
- 10. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

11. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

### **Compliance Requirements**

12. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
13. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:
  - A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:
    - (i) For sources in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020:
      - (1) Title 30 TAC § 117.9020(2)(A), (C), and (D)
    - (ii) For electric generating facilities in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020(2)(B)
  - B. The permit holder shall comply with the Initial Control Plan unit listing requirement in 30 TAC § 117.350(c) and (c)(1).
  - C. The permit holder shall comply with the requirements of 30 TAC § 117.354 for Final Control Plan Procedures for Attainment Demonstration Emission Specifications and 30 TAC § 117.356 for Revision of Final Control Plan.
14. Use of Emission Credits to comply with applicable requirements:
  - A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115

- (ii) Title 30 TAC Chapter 117
    - (iii) Offsets for Title 30 TAC Chapter 116
  - B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:
    - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)-(d)
    - (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1
    - (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)-(d)
    - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122
    - (v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)
15. Use of Discrete Emission Credits to comply with the applicable requirements:
- A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115
    - (ii) Title 30 TAC Chapter 117
    - (iii) If applicable, offsets for Title 30 TAC Chapter 116
    - (iv) Temporarily exceed state NSR permit allowables
  - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
    - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
    - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
    - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
    - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

- (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

### **Protection of Stratospheric Ozone**

16. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:
- A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

### **Alternative Requirements**

17. The permit holder shall comply with the approved alternative means of control (AMOC); alternative monitoring, recordkeeping, or reporting requirements; or requirements determined to be equivalent to an otherwise applicable requirement contained in the Alternative Requirements attachment of this permit. Units complying with an approved alternative requirement have reference to the approval in the Applicable Requirements summary listing for the unit. The permit holder shall maintain the original documentation, from the EPA Administrator, demonstrating the method or limitation utilized. Documentation shall be maintained and made available in accordance with 30 TAC § 122.144.

### **Permit Location**

18. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

### **Permit Shield (30 TAC § 122.148)**

19. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

## **Attachments**

**Applicable Requirements Summary**

**Additional Monitoring Requirements**

**Permit Shield**

**New Source Review Authorization References**

**Alternative Requirement**

**Applicable Requirements Summary**

**Unit Summary ..... 14**

**Applicable Requirements Summary ..... 18**

Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (§ 122.144), Reporting Terms and Conditions (§ 122.145), and Compliance Certification Terms and Conditions (§ 122.146) continue to apply.

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
BLR-2	Boilers/ Steam Generators/ Steam Generating Units	N/A	117B-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
CHP-1	Emission Points/ Stationary Vents/ Process Vents	N/A	111A-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
COMP-100	SRIC Engines	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
CTG-1	Stationary Turbines	N/A	117B-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
CTG-1	Stationary Turbines	N/A	60KKKK-1	40 CFR Part 60, Subpart KKKK	Duct Burner = The heat recovery system includes a duct burner., 75% of Peak = The combustion turbine does not operate at less than 75% of peak load or at temperatures less than zero degrees F.
CTG-1	Stationary Turbines	N/A	60KKKK-2	40 CFR Part 60, Subpart KKKK	Duct Burner = The heat recovery system does not include a duct burner., 75% of Peak = The combustion turbine does not operate at less than 75% of peak load or at temperatures less than zero degrees F.
CTG-1	Stationary Turbines	N/A	60KKKK-3	40 CFR Part 60, Subpart KKKK	Duct Burner = The heat recovery system includes a duct burner., 75% of Peak = The combustion turbine operates at less than 75% of peak load or at temperatures less than zero degrees F., 30 MW = The combustion turbine has an



### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					output of 30 MW or greater.
CTG-1	Stationary Turbines	N/A	60KKKK-4	40 CFR Part 60, Subpart KKKK	Duct Burner = The heat recovery system does not include a duct burner., 75% of Peak = The combustion turbine operates at less than 75% of peak load or at temperatures less than zero degrees F., 30 MW = The combustion turbine has an output of 30 MW or greater.
CTG-1	Stationary Turbines	N/A	60KKKK-5	40 CFR Part 60, Subpart KKKK	Duct Burner = The heat recovery system includes a duct burner., 75% of Peak = The combustion turbine operates at less than 75% of peak load or at temperatures less than zero degrees F., 30 MW = The combustion turbine has an output of less than 30 MW.
CTG-1	Stationary Turbines	N/A	60KKKK-6	40 CFR Part 60, Subpart KKKK	Duct Burner = The heat recovery system does not include a duct burner., 75% of Peak = The combustion turbine operates at less than 75% of peak load or at temperatures less than zero degrees F., 30 MW = The combustion turbine has an output of less than 30 MW.
EG-100	SRIC Engines	N/A	117B-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
EG-100	SRIC Engines	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
EG-200	SRIC Engines	N/A	117B-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
EG-200	SRIC Engines	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRP-BOILER1	Boilers/ Steam Generators/ Steam Generating Units	BLR-3, BLR-4	117B-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRP-BOILER2	Boilers/ Steam Generators/ Steam Generating Units	BLR-7, BLR-8	112A-1	30 TAC Chapter 112, Sulfur Compounds	No changing attributes.
GRP-BOILER2	Boilers/ Steam Generators/ Steam Generating Units	BLR-7, BLR-8	117B-1	30 TAC Chapter 117, Subchapter B	Fuel Type #1 = Natural gas.
GRP-BOILER2	Boilers/ Steam Generators/ Steam Generating Units	BLR-7, BLR-8	117B-2	30 TAC Chapter 117, Subchapter B	Fuel Type #1 = Liquid fuel
GRP-BOILER2	Boilers/ Steam Generators/ Steam Generating Units	BLR-7, BLR-8	60Db-1	40 CFR Part 60, Subpart Db	D-Series Fuel Type #1 = Natural gas.
GRP-BOILER2	Boilers/ Steam Generators/ Steam Generating Units	BLR-7, BLR-8	60Db-2	40 CFR Part 60, Subpart Db	D-Series Fuel Type #1 = Distillate oil that contains no more than 0.3 weight percent sulfur or has a SO <sub>2</sub> emission rate less than 140 ng/J <sup>2</sup> (0.32 lb/MMBtu) heat input.
GRP-ENGINE1	SRIC Engines	EG-500, EG-600, EG-700, EG-800	117B-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRP-ENGINE1	SRIC Engines	EG-500, EG-600, EG-700, EG-800	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRP-TANK3	Storage Tanks/Vessels	UST-1, UST-2	115B-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRP-TANK4	Storage Tanks/Vessels	T-45, T-48	115B-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRP-VENT1	Emission Points/ Stationary Vents/ Process Vents	BLR-2VENT, BLR-3VENT	111A-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements  (30 TAC § 122.144)	Reporting Requirements  (30 TAC § 122.145)
BLR-2	EU	117B-1	NO <sub>x</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(1)(A) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO <sub>x</sub> emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
BLR-2	EU	117B-1	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.310(c)(3) § 117.340(f)(1)	CO emissions must not exceed 400 ppmv at 3.0% O <sub>2</sub> , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 117.8120		§ 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120(1) § 117.8120(1)(A)	§ 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
CHP-1	EP	111A-1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
COMP-100	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.1 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b)	For each existing non-emergency, non-black start CI stationary RICE with a site rating less than or equal to 300 HP, located at an area source, you must comply with the requirements as specified in Table 2d.1.a-c.	§ 63.6625(i) § 63.6640(a) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii § 63.6640(b)	§ 63.6625(i) § 63.6655(a) § 63.6655(a)(1) § 63.6655(d) § 63.6655(e) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(f)
CTG-1	EU	117B-1	NO <sub>x</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(10)(A) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.320(a) § 117.320(b) [G]§ 117.320(c) § 117.320(i) § 117.320(j) § 117.320(k) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO <sub>x</sub> emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.320(d) [G]§ 117.320(e) § 117.320(h) § 117.320(k) [G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2) § 117.335(g) § 117.340(a) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3)	§ 117.320(f) § 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.320(g) § 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		
CTG-1	EU	117B-1	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.340(f)(1)	CO emissions must not exceed 400 ppmv at 3.0% O 2, dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120 § 117.8120(1) § 117.8120(1)(A)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
CTG-1	EU	117B-1	NH <sub>3</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(2) § 117.310(c)(2)(B) § 117.340(f)(1)	For stationary gas turbines that inject urea or ammonia into the exhaust stream for NO <sub>x</sub> control, ammonia emissions must not exceed 10 ppmv at 15% O <sub>2</sub> , dry.	§ 117.335(a)(2) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(g) § 117.340(d) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8130 § 117.8130(4)	§ 117.345(a) § 117.345(f) § 117.345(f)(11) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
CTG-1	EU	60KKKK-1	NO <sub>x</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4320(a)-Table 1 § 60.4320(a) § 60.4320(b) § 60.4325 § 60.4333(a) § 60.4335(b)(1) [G]§ 60.4345	New turbine firing natural gas with a heat input at peak load greater than 50 MMBtu/h and less than or equal to 850 MMBtu/h must meet the nitrogen oxides emission standard of 25 ppm at 15 percent O <sub>2</sub> .	§ 60.4335(b)(1) [G]§ 60.4345 § 60.4350(a) § 60.4350(b) § 60.4350(c) § 60.4350(d) § 60.4350(e) § 60.4350(f) § 60.4350(h) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(1)	[G]§ 60.4345 § 60.4350(b)	[G]§ 60.4345 § 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b) § 60.4395



### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 60.4400(b)(2) § 60.4400(b)(4) § 60.4400(b)(5) § 60.4400(b)(6) [G]§ 60.4405		
CTG-1	EU	60KKKK-1	SO <sub>2</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4330(a)(2) § 60.4333(a)	You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO <sub>2</sub> /J (0.060 lb SO <sub>2</sub> /MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.	§ 60.4365 § 60.4365(a) § 60.4415(a) § 60.4415(a)(1) § 60.4415(a)(1)(ii)	§ 60.4365(a)	§ 60.4375(a)
CTG-1	EU	60KKKK-2	NO <sub>x</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4320(a)-Table 1 § 60.4320(a) § 60.4320(b) § 60.4325 § 60.4333(a) § 60.4335(b)(1) [G]§ 60.4345	New turbine firing natural gas with a heat input at peak load greater than 50 MMBtu/h and less than or equal to 850 MMBtu/h must meet the nitrogen oxides emission standard of 25 ppm at 15 percent O <sub>2</sub> .	§ 60.4335(b)(1) [G]§ 60.4345 § 60.4350(a) § 60.4350(b) § 60.4350(c) § 60.4350(d) § 60.4350(e) § 60.4350(f) § 60.4350(h) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(1) § 60.4400(b)(4) § 60.4400(b)(5) § 60.4400(b)(6) [G]§ 60.4405	[G]§ 60.4345 § 60.4350(b)	[G]§ 60.4345 § 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b) § 60.4395
CTG-1	EU	60KKKK-2	SO <sub>2</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4330(a)(2) § 60.4333(a)	You must not burn in the subject stationary combustion turbine any	§ 60.4365 § 60.4365(a) § 60.4415(a)	§ 60.4365(a)	§ 60.4375(a)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						fuel which contains total potential sulfur emissions in excess of 26 ng SO <sub>2</sub> /J (0.060 lb SO <sub>2</sub> /MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.	§ 60.4415(a)(1) § 60.4415(a)(1)(ii)		
CTG-1	EU	60KKKK-3	NO <sub>x</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4320(a)-Table 1 § 60.4320(a) § 60.4320(b) § 60.4333(a) § 60.4335(b)(1) [G]§ 60.4345	Turbines operating at less than 75 percent of peak load, or turbines operating at temperatures less than 0 degrees F with greater than 30 MW output must meet the nitrogen oxides emission standard of 96 ppm at 15 percent O <sub>2</sub> .	§ 60.4335(b)(1) [G]§ 60.4345 § 60.4350(a) § 60.4350(b) § 60.4350(c) § 60.4350(d) § 60.4350(e) § 60.4350(f) § 60.4350(h) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(1) § 60.4400(b)(2) § 60.4400(b)(4) § 60.4400(b)(5) § 60.4400(b)(6) [G]§ 60.4405	[G]§ 60.4345 § 60.4350(b)	[G]§ 60.4345 § 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b) § 60.4395
CTG-1	EU	60KKKK-3	SO <sub>2</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4330(a)(2) § 60.4333(a)	You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO <sub>2</sub> /J (0.060 lb SO <sub>2</sub> /MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel	§ 60.4365 § 60.4365(a) § 60.4415(a) § 60.4415(a)(1) § 60.4415(a)(1)(ii)	§ 60.4365(a)	§ 60.4375(a)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						must meet this requirement.			
CTG-1	EU	60KKKK-4	NO <sub>x</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4320(a)-Table 1 § 60.4320(a) § 60.4320(b) § 60.4333(a) § 60.4335(b)(1) [G]§ 60.4345	Turbines operating at less than 75 percent of peak load, or turbines operating at temperatures less than 0 degrees F with greater than 30 MW output must meet the nitrogen oxides emission standard of 96 ppm at 15 percent O <sub>2</sub> .	§ 60.4335(b)(1) [G]§ 60.4345 § 60.4350(a) § 60.4350(b) § 60.4350(c) § 60.4350(d) § 60.4350(e) § 60.4350(f) § 60.4350(h) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(1) § 60.4400(b)(4) § 60.4400(b)(5) § 60.4400(b)(6) [G]§ 60.4405	[G]§ 60.4345 § 60.4350(b)	[G]§ 60.4345 § 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b) § 60.4395
CTG-1	EU	60KKKK-4	SO <sub>2</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4330(a)(2) § 60.4333(a)	You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO <sub>2</sub> /J (0.060 lb SO <sub>2</sub> /MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.	§ 60.4365 § 60.4365(a) § 60.4415(a) § 60.4415(a)(1) § 60.4415(a)(1)(ii)	§ 60.4365(a)	§ 60.4375(a)
CTG-1	EU	60KKKK-5	NO <sub>x</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4320(a)-Table 1 § 60.4320(a) § 60.4320(b) § 60.4333(a) § 60.4335(b)(1) [G]§ 60.4345	Turbines operating at less than 75 percent of peak load, or turbines operating at temperatures less than 0 degrees F with less than or equal to 30 MW output	§ 60.4335(b)(1) [G]§ 60.4345 § 60.4350(a) § 60.4350(b) § 60.4350(c) § 60.4350(d)	[G]§ 60.4345 § 60.4350(b)	[G]§ 60.4345 § 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b) § 60.4395

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						must meet the nitrogen oxides emission standard of 150 ppm at 15 percent O <sub>2</sub> .	§ 60.4350(e) § 60.4350(f) § 60.4350(h) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(1) § 60.4400(b)(2) § 60.4400(b)(4) § 60.4400(b)(5) § 60.4400(b)(6) [G]§ 60.4405		
CTG-1	EU	60KKKK-5	SO <sub>2</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4330(a)(2) § 60.4333(a)	You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO <sub>2</sub> /J (0.060 lb SO <sub>2</sub> /MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.	§ 60.4365 § 60.4365(a) § 60.4415(a) § 60.4415(a)(1) § 60.4415(a)(1)(ii)	§ 60.4365(a)	§ 60.4375(a)
CTG-1	EU	60KKKK-6	NO <sub>x</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4320(a)-Table 1 § 60.4320(a) § 60.4320(b) § 60.4333(a) § 60.4335(b)(1) [G]§ 60.4345	Turbines operating at less than 75 percent of peak load, or turbines operating at temperatures less than 0 degrees F with less than or equal to 30 MW output must meet the nitrogen oxides emission standard of 150 ppm at 15 percent O <sub>2</sub> .	§ 60.4335(b)(1) [G]§ 60.4345 § 60.4350(a) § 60.4350(b) § 60.4350(c) § 60.4350(d) § 60.4350(e) § 60.4350(f) § 60.4350(h) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(1) § 60.4400(b)(4)	[G]§ 60.4345 § 60.4350(b)	[G]§ 60.4345 § 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b) § 60.4395

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements  (30 TAC § 122.144)	Reporting Requirements  (30 TAC § 122.145)
							§ 60.4400(b)(5) § 60.4400(b)(6) [G]§ 60.4405		
CTG-1	EU	60KKKK-6	SO <sub>2</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4330(a)(2) § 60.4333(a)	You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO <sub>2</sub> /J (0.060 lb SO <sub>2</sub> /MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.	§ 60.4365 § 60.4365(a) § 60.4415(a) § 60.4415(a)(1) § 60.4415(a)(1)(ii)	§ 60.4365(a)	§ 60.4375(a)
EG-100	EU	117B-1	NO <sub>x</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(9)(C)(i) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) [G]§ 117.310(f) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(2)(C) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO <sub>x</sub> emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.340(h) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.340(p)(2)(A) § 117.340(p)(2)(B) § 117.340(p)(2)(C) § 117.345(f)(3)(A) § 117.345(f)(3)(A)(ii) § 117.8000(b) § 117.8000(c) § 117.8000(c)(1) § 117.8000(c)(3) § 117.8000(c)(5)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(10) § 117.345(f)(3) § 117.345(f)(3)(B) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) § 117.340(p)(2)(D) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 117.8000(c)(6) [G]§ 117.8000(d) § 117.8140(a) § 117.8140(a)(1) § 117.8140(a)(2) § 117.8140(a)(2)(A) [G]§ 117.8140(a)(2)(B) § 117.8140(b)		
EG-100	EU	117B-1	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(B)	CO emissions must not exceed 3.0 g/hp-hr for stationary internal combustion engines.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.340(h) § 117.345(f)(3) § 117.345(f)(3)(A) § 117.345(f)(3)(A)(ii) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8120 § 117.8120(2) [G]§ 117.8120(2)(A) § 117.8120(2)(B) § 117.8140(a) § 117.8140(a)(1) § 117.8140(a)(2) § 117.8140(a)(2)(A) [G]§ 117.8140(a)(2)(B) § 117.8140(b)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(10) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements  (30 TAC § 122.144)	Reporting Requirements  (30 TAC § 122.145)
EG-100	EU	63ZZZZ-1	CO	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.3.b § 63.6595(a)(1) § 63.6595(c) § 63.6603(a)-Table2b.2.a § 63.6603(a)-Table2b.2.b § 63.6604(a) § 63.6605(a) § 63.6605(b) § 63.6625(h) § 63.6630(a) § 63.6640(b)	For each existing non-emergency, non-black start CI stationary RICE with a site rating greater than 500 HP, located at an area source, you must reduce CO emissions by 70% or more.	§ 63.6612(a) [G]§ 63.6612(b) § 63.6615 § 63.6620(a) § 63.6620(a)-Table3.4 § 63.6620(a)-Table4.1.a.i § 63.6620(a)-Table4.1.a.ii § 63.6620(a)-Table4.1.a.iii § 63.6620(b) § 63.6620(d) § 63.6620(e)(1) [G]§ 63.6620(e)(2) [G]§ 63.6625(b) § 63.6630(a)-Table5.1.a.i § 63.6630(a)-Table5.1.a.ii § 63.6630(a)-Table5.1.a.iii § 63.6635(a) § 63.6635(b) § 63.6640(a) § 63.6640(a)-Table6.10.a.i § 63.6640(a)-Table6.10.a.ii § 63.6640(a)-Table6.10.a.iii § 63.6640(a)-Table6.10.a.iv § 63.6640(a)-Table6.10.a.v § 63.6640(b)	§ 63.6620(i) § 63.6630(a)-Table5.1.a.iii § 63.6635(a) § 63.6635(c) § 63.6655(a) § 63.6655(a)(1) § 63.6655(a)(2) § 63.6655(a)(3) § 63.6655(a)(4) § 63.6655(a)(5) [G]§ 63.6655(b) § 63.6655(d) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6620(i) § 63.6630(c) § 63.6640(b) § 63.6640(e) § 63.6645(a) § 63.6645(g) § 63.6645(h) § 63.6645(h)(2) § 63.6650(a) § 63.6650(a)-Table7.1.a.i § 63.6650(a)-Table7.1.a.ii § 63.6650(a)-Table7.1.b § 63.6650(a)-Table7.1.c § 63.6650(b) § 63.6650(b)(1) § 63.6650(b)(2) § 63.6650(b)(3) § 63.6650(b)(4) § 63.6650(b)(6) § 63.6650(b)(7) § 63.6650(b)(8) § 63.6650(b)(9) [G]§ 63.6650(c) [G]§ 63.6650(e) § 63.6650(f)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EG-200	EU	117B-1	EXEMPT	30 TAC Chapter 117, Subchapter B	§ 117.303(a)(6)(D) [G]§ 117.310(f)	Units exempted from the provisions of this division, except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1), and 117.354(a)(5), include stationary gas turbines and stationary internal combustion engines that are used exclusively in emergency situations, except that operation for testing or maintenance purposes is allowed for up to 52 hours per year, based on a rolling 12-month average.	None	§ 117.340(j) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None
EG-200	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) § 63.6640(f)(1) [G]§ 63.6640(f)(2) [G]§ 63.6640(f)(4)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii § 63.6640(b)	§ 63.6625(i) § 63.6655(a) § 63.6655(a)(1) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(f)
GRP-BOILER1	EU	117B-1	NO <sub>x</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(1)(A) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO <sub>x</sub> emission	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3)



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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.335(f)(2) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)	§ 117.8100(a)(5)(C)	§ 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
GRP-BOILER1	EU	117B-1	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.310(c)(3) § 117.340(f)(1) § 117.8120	CO emissions must not exceed 400 ppmv at 3.0% O 2, dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(b)(1)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 117.340(b)(3) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120(1) § 117.8120(1)(A)		[G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
GRP-BOILER2	EU	112A-1	SO <sub>2</sub>	30 TAC Chapter 112, Sulfur Compounds	§ 112.9(c) § 112.9(b)	No person shall use liquid fuel with a sulfur content greater than 0.3% by weight, or allow emissions of SO <sub>2</sub> to exceed 150 ppmv, based on 20% excess air, averaged over a 3-hour period.	§ 112.2(a) ** See Periodic Monitoring Summary	§ 112.2(c)	§ 112.2(b)
GRP-BOILER2	EU	117B-1	NO <sub>x</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(1)(A) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO <sub>x</sub> emission specifications but shall	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		[G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
GRP-BOILER2	EU	117B-1	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.310(c)(3) § 117.340(f)(1) § 117.8120	CO emissions must not exceed 400 ppmv at 3.0% O 2, dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements  (30 TAC § 122.144)	Reporting Requirements  (30 TAC § 122.145)
							§ 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120(1) § 117.8120(1)(A)		§ 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
GRP-BOILER2	EU	117B-2	NO <sub>x</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(7) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO <sub>x</sub> emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		[G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
GRP-BOILER2	EU	117B-2	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.310(c)(3) § 117.340(f)(1) § 117.8120	CO emissions must not exceed 400 ppmv at 3.0% O <sub>2</sub> , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C) § 117.8100(a)(2)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							[G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120(1) § 117.8120(1)(A)		
GRP-BOILER2	EU	60Db-1	SO <sub>2</sub>	40 CFR Part 60, Subpart Db	§ 60.42b(k)(2)	Units firing only very low sulfur oil and/or a mixture of gaseous fuels with a potential SO2 emission rate of 140 ng/J (0.32 lb/MMBtu) heat input or less are exempt from the SO2 emissions limit in §60.42b(k)(1).	§ 60.47b(f)	§ 60.45b(k) § 60.49b(o) § 60.49b(r) § 60.49b(r)(1)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(r) § 60.49b(r)(1)
GRP-BOILER2	EU	60Db-1	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRP-BOILER2	EU	60Db-1	PM (OPACITY)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						MMBtu/hr).			
GRP-BOILER2	EU	60Db-1	NO <sub>x</sub>	40 CFR Part 60, Subpart Db	§ 60.44b(l)(2) § 60.44b(h) § 60.44b(i) § 60.46b(a)	Affected facilities with a low heat release rate and combusting natural gas or distillate oil in excess of 30% of the heat input from the combustion of all fuels, a limit determined by use of the specified formula.	§ 60.46b(c) § 60.46b(e) § 60.46b(e)(1) § 60.46b(e)(4) [G]§ 60.48b(b) § 60.48b(c) § 60.48b(d) § 60.48b(e) [G]§ 60.48b(e)(2) § 60.48b(e)(3) § 60.48b(f) § 60.48b(g)(1)	[G]§ 60.48b(b) § 60.48b(c) [G]§ 60.49b(d) [G]§ 60.49b(g) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b) § 60.49b(h) § 60.49b(h)(4) § 60.49b(i) § 60.49b(v) § 60.49b(w)
GRP-BOILER2	EU	60Db-2	SO <sub>2</sub>	40 CFR Part 60, Subpart Db	§ 60.42b(k)(2)	Units firing only very low sulfur oil and/or a mixture of gaseous fuels with a potential SO2 emission rate of 140 ng/J (0.32 lb/MMBtu) heat input or less are exempt from the SO2 emissions limit in §60.42b(k)(1).	§ 60.47b(f)	§ 60.45b(k) § 60.49b(o) § 60.49b(r) § 60.49b(r)(1)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(r) § 60.49b(r)(1)
GRP-BOILER2	EU	60Db-2	PM	40 CFR Part 60, Subpart Db	§ 60.43b(h)(1) § 60.43b(e) § 60.43b(g) § 60.46b(a)	No facility for which construction, reconstruction, or modification began after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels shall discharge PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input.	§ 60.46b(b) § 60.46b(d) § 60.46b(d)(1) [G]§ 60.46b(d)(2) § 60.46b(d)(3) § 60.46b(d)(4) § 60.46b(d)(5) [G]§ 60.46b(d)(6)	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-BOILER2	EU	60Db-2	PM (OPACITY)	40 CFR Part 60, Subpart Db	§ 60.43b(f) § 60.43b(g) § 60.46b(a) [G]§ 60.48b(j)	On/after §60.8 tests, no facility firing specified fuels shall discharge gases exhibiting greater than 20% opacity (6-minute average), except for one 6-minute/hour of not more than 27% opacity.	§ 60.46b(d) § 60.46b(d)(7) § 60.48b(a) [G]§ 60.48b(a)(1) [G]§ 60.48b(a)(2) § 60.48b(a)(3)  ** See Alternative Requirements	§ 60.48b(a) [G]§ 60.48b(a)(1) [G]§ 60.48b(a)(2) § 60.48b(a)(3) [G]§ 60.48b(j) [G]§ 60.49b(d) [G]§ 60.49b(f) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b) § 60.49b(h) § 60.49b(h)(3) § 60.49b(v) § 60.49b(w)
GRP-BOILER2	EU	60Db-2	NO <sub>x</sub>	40 CFR Part 60, Subpart Db	§ 60.44b(l)(2) § 60.44b(h) § 60.44b(i) § 60.46b(a)	Affected facilities with a low heat release rate and combusting natural gas or distillate oil in excess of 30% of the heat input from the combustion of all fuels, a limit determined by use of the specified formula.	§ 60.46b(c) § 60.46b(e) § 60.46b(e)(1) § 60.46b(e)(4) [G]§ 60.48b(b) § 60.48b(c) § 60.48b(d) § 60.48b(e) [G]§ 60.48b(e)(2) § 60.48b(e)(3) § 60.48b(f) § 60.48b(g)(1)	[G]§ 60.48b(b) § 60.48b(c) [G]§ 60.49b(d) [G]§ 60.49b(g) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b) § 60.49b(h) § 60.49b(h)(4) § 60.49b(i) § 60.49b(v) § 60.49b(w)
GRP-ENGINE1	EU	117B-1	EXEMPT	30 TAC Chapter 117, Subchapter B	§ 117.303(a)(6)(D) [G]§ 117.310(f)	Units exempted from the provisions of this division, except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1), and 117.354(a)(5), include stationary gas turbines and stationary internal combustion engines that are used exclusively in emergency situations, except that operation for testing or maintenance purposes is allowed for up	None	§ 117.340(j) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None



### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition I.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						to 52 hours per year, based on a rolling 12-month average.			
GRP-ENGINE1	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) § 63.6640(f)(1) [G]§ 63.6640(f)(2) [G]§ 63.6640(f)(4)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii § 63.6640(b)	§ 63.6625(i) § 63.6655(a) § 63.6655(a)(1) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(f)
GRP-TANK3	EU	115B-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRP-TANK4	EU	115B-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRP-VENT1	EP	111A-1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(A) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 30% averaged over a six minute period.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

**Additional Monitoring Requirements**

**Periodic Monitoring Summary ..... 41**

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: CHP-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111A-1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: n/a	
<p>Deviation Limit: There shall be no visible emissions. If visible emissions are observed during the firing of an alternate fuel, the permit holder shall either report a deviation or perform Test Method 9 and opacity shall not exceed 15%.</p> <p>Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRP-BOILER2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: 112A-1
Pollutant: SO <sub>x</sub>	Main Standard: § 112.9(c)
Monitoring Information	
Indicator: Sulfur content of No.2 fuel oil	
Minimum Frequency: Anytime No. 2 fuel is purchased	
Averaging Period: n/a	
Deviation Limit: The No. 2 fuel oil shall contain no more than 0.05% sulfur by weight.	
Periodic Monitoring Text: The total hours of operation over any consecutive 12-month period shall not exceed 720 hours on No. 2 fuel oil. For No. 2 fuel oil, records of dates of operation, fuel use, and sulfur content of the fuel shall be kept.	

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRP-VENT1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111A-1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered a deviation.	
Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation.	

**Permit Shield**

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### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
BLR-2	N/A	40 CFR Part 60, Subpart D	Steam generating unit was constructed prior to and not modified after 08/17/1971.
CHP-1	N/A	40 CFR Part 63, Subpart YYYY	Site is not a major source of HAPs.
COMP-100	N/A	30 TAC Chapter 117, Subchapter B	Engine is used solely to power other engines during startups.
COMP-100	N/A	40 CFR Part 60, Subpart IIII	Stationary CI ICE was constructed prior to and not modified/reconstructed after 07/11/2005.
CTG-1	N/A	40 CFR Part 60, Subpart GG	Stationary combustion turbines regulated under 40 CFR 60 Subpart KKKK are exempt from the requirements of 40 CFR 60 Subpart GG.
EG-100	N/A	40 CFR Part 60, Subpart IIII	Stationary CI ICE was constructed prior to and not modified/reconstructed after 07/11/2005.
EG-200	N/A	40 CFR Part 60, Subpart IIII	Stationary CI ICE was constructed prior to and not modified/reconstructed after 07/11/2005.
GRP-BOILER1	BLR-3, BLR-4	40 CFR Part 60, Subpart D	Steam generating unit has a heat input rate less than 250 MMBtu/hr.
GRP-BOILER2	BLR-7, BLR-8	40 CFR Part 63, Subpart JJJJJ	Boiler is defined as a gas-fired boiler.
GRP-DEGREASER	DEGR-1, DEGR-2, DEGR-4	30 TAC Chapter 115, Degreasing Processes	Remote reservoir cold solvent cleaner has a vapor pressure less than 0.6 psia at 100 degrees F, a drain area less than 16 in <sup>2</sup> , and waste solvent is disposed of in enclosed containers.
GRP-ENGINE1	EG-500, EG-600, EG-700, EG-800	40 CFR Part 60, Subpart IIII	Stationary CI ICE was constructed prior to and not modified/reconstructed after 07/11/2005.

### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
GRP-FUGS	FUGNGCHP, FUGNH3	30 TAC Chapter 115, HRVOC Fugitive Emissions	Site is not in HRVOC service.
GRP-TANK1	T-12, T-3A, T-32, T-33, T-35, T-36, T-37, T-4A, T-46A, T-50, T-51, T-52, T-53A, T-54, T-7, T-8, T-9, TES	30 TAC Chapter 115, Storage of VOCs	Storage vessel does not store a VOC.
GRP-TANK1	T-12, T-3A, T-32, T-33, T-35, T-36, T-37, T-4A, T-46A, T-50, T-51, T-52, T-53A, T-54, T-7, T-8, T-9, TES	40 CFR Part 60, Subpart Kb	Storage vessel does not store a VOC.
GRP-TANK2	FH-1, T-13, T-15, T-28, T-38, T-49, T-55, T-56, T-57, T-58	30 TAC Chapter 115, Storage of VOCs	Storage vessel capacity is less than 1000 gallons.
GRP-TANK2	FH-1, T-13, T-15, T-28, T-38, T-49, T-55, T-56, T-57, T-58	40 CFR Part 60, Subpart Kb	Storage vessel capacity is less than 75 m3.
GRP-TANK3	UST-1, UST-2	40 CFR Part 60, Subpart Ka	Storage vessel capacity is less than 40000 gallons.
GRP-TANK4	T-45, T-48	40 CFR Part 60, Subpart Kb	Storage vessel capacity is less than 75 m3.
GRP-TOWER1	CT-200, CT-400, CT-600, CT-700	40 CFR Part 63, Subpart Q	Industrial process cooling tower does not operate with chromium-based water treatment chemicals after 09/08/1994.
PAINT	N/A	30 TAC Chapter 115, Subchapter E, Division 5	Aerosol coatings are exempt from this division.



**New Source Review Authorization References**

<b>New Source Review Authorization References.....</b>	<b>48</b>
<b>New Source Review Authorization References by Emission Unit .....</b>	<b>49</b>

### New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

<b>Prevention of Significant Deterioration (PSD) Permits</b>	
PSD Permit No.: PSDTX1103	Issuance Date: 06/06/2011
<b>Nonattainment (NA) Permits</b>	
NA Permit No.: N71	Issuance Date: 06/06/2011
<b>Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.</b>	
Authorization No.: 46189	Issuance Date: 06/06/2011
Authorization No.: 8727	Issuance Date: 04/18/2006
<b>Permits By Rule (30 TAC Chapter 106) for the Application Area</b>	
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.512	Version No./Date: 06/13/2001
Number: 3	Version No./Date: 09/17/1973
Number: 3	Version No./Date: 04/04/1975
Number: 8	Version No./Date: 12/01/1972
Number: 51	Version No./Date: 11/05/1986
Number: 58	Version No./Date: 09/23/1982
Number: 103	Version No./Date: 07/20/1992

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
BLR-2	STEAM BOILER	46189, N71, PSDTX1103
BLR-2VENT	STEAM BOILER VENT	46189, N71, PSDTX1103
BLR-3	STEAM BOILER	3/09/17/1973
BLR-3VENT	STEAM BOILER VENT	3/09/17/1973
BLR-4	STEAM BOILER	3/09/17/1973
BLR-7	STEAM BOILER	46189, N71, PSDTX1103
BLR-8	STEAM BOILER	46189, N71, PSDTX1103
CHP-1	COMBUSTION TURBINE GENERATOR STACK	46189, N71, PSDTX1103
COMP-100	LISTER ST2A CI ICE - 11 KW	106.512/06/13/2001
CT-200	COOLING TOWER	8/12/01/1972
CT-400	COOLING TOWER	106.371/09/04/2000
CT-600	COOLING TOWER	46189, N71, PSDTX1103
CT-700	COOLING TOWER	8/12/01/1972
CTG-1	GENERAL ELECTRIC LM6000 TURBINE - 64369 HP	46189, N71, PSDTX1103
DEGR-1	DEGREASER	106.454/09/04/2000
DEGR-2	DEGREASER	106.454/09/04/2000
DEGR-4	DEGREASER	106.454/09/04/2000
EG-100	COOPER-BESSEMER LSVB20 CI ICE - 6168 KW	8727
EG-200	KOHLER 80ROZJ71 CI ICE - 110 KW	106.511/09/04/2000

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
EG-500	CUMMINS 200DQKC CI ICE - 2148 KW	106.511/09/04/2000
EG-600	CUMMINS 200DQKC CI ICE - 2148 KW	106.511/09/04/2000
EG-700	CUMMINS 200DQKC CI ICE - 2148 KW	106.511/09/04/2000
EG-800	CUMMINS 200DQKC CI ICE - 2148 KW	106.511/09/04/2000
FH-1	DIESEL FUEL STORAGE TANK	106.473/09/04/2000
FUGNGCHP	CHP NATURAL GAS FUGITIVES	46189, N71, PSDTX1103
FUGNH3	AMMONIA FUGITIVES	46189, N71, PSDTX1103
PAINT	SURFACE COATING OPERATIONS	106.263/11/01/2001
T-12	AQUEOUS SALT SOLUTION STORAGE TANK	51/11/05/1986
T-13	DIESEL FUEL STORAGE TANK	51/11/05/1986
T-15	USED OIL STORAGE TANK	51/11/05/1986
T-28	DIESEL FUEL STORAGE TANK	51/11/05/1986
T-32	SODIUM HYPOCHLORITE STORAGE TANK	106.472/09/04/2000
T-33	SODIUM HYPOCHLORITE STORAGE TANK	106.472/09/04/2000
T-35	R-12 REFRIGERANT STORAGE TANK	51/11/05/1986
T-36	R-22 REFRIGERANT STORAGE TANK	103/07/20/1992
T-37	R-134A REFRIGERANT STORAGE TANK	103/07/20/1992
T-38	LUBE OIL STORAGE TANK	106.472/09/04/2000
T-3A	AQUEOUS SALT SOLUTION STORAGE TANK	51/11/05/1986

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
T-45	USED LUBE OIL STORAGE TANK	106.472/09/04/2000
T-46A	SULFURIC ACID STORAGE TANK	106.472/09/04/2000
T-48	DIESEL FUEL STORAGE TANK	106.472/09/04/2000
T-49	DIESEL FUEL STORAGE TANK	106.472/09/04/2000
T-4A	AQUEOUS SALT SOLUTION STORAGE TANK	51/11/05/1986
T-50	SULFURIC ACID STORAGE TANK	106.472/09/04/2000
T-51	AQUEOUS SALT SOLUTION STORAGE TANK	106.472/09/04/2000
T-52	AQUEOUS SALT SOLUTION STORAGE TANK	106.472/09/04/2000
T-53A	SODIUM HYPOCHLORITE STORAGE TANK	106.472/09/04/2000
T-54	AQUA AMMONIA STORAGE TANK	106.472/09/04/2000
T-55	AQUEOUS SALT SOLUTION STORAGE TANK	106.472/09/04/2000
T-56	AQUEOUS SALT SOLUTION STORAGE TANK	106.472/09/04/2000
T-57	CHEMICAL TREATMENT STORAGE TANK	106.472/09/04/2000
T-58	LUBE OIL STORAGE TANK	106.472/09/04/2000
T-7	SULFURIC ACID STORAGE TANK	106.472/09/04/2000
T-8	AQUEOUS SALT SOLUTION STORAGE TANK	51/11/05/1986
T-9	AQUEOUS SALT SOLUTION STORAGE TANK	51/11/05/1986
TES	CHILLED WATER STORAGE TANK	106.472/09/04/2000
UST-1	DIESEL FUEL UNDERGROUND STORAGE TANK	58/09/23/1982

### **New Source Review Authorization References by Emissions Unit**

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

<b>Unit/Group/Process ID No.</b>	<b>Emission Unit Name/Description</b>	<b>New Source Review Authorization</b>
UST-2	DIESEL FUEL UNDERGROUND STORAGE TANK	58/09/23/1982

**Alternative Requirement**

**Alternative Requirement..... 54**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS, TX 75202-2733

MAR 05 2004

E. Bruce Turner  
Vice President, Engineering  
Thermal Energy Corporation  
1615 Braeswood  
Houston, Texas 77030

Re: Request for Approval - Alternative Monitoring Method  
New Source Performance Standards (NSPS)  
40 C.F.R. Part 60, Subpart Db

Dear Mr. Turner:

This letter is in response to your request for approval of an alternative monitoring plan, dated September 22, 2003. You stated in your request that you are seeking approval of the use of certain monitoring methods as an alternative to the monitoring in NSPS Part 60, Subpart Db. You indicated that the approval request is for two boilers subject to NSPS Subpart Db, 40 C.F.R. 60.48b. These boilers are located at the Texas Medical Center facility in Houston, Texas, and operated by Thermal Energy Corporation (TECO).

Your AMP request letter, dated September 22, 2003, indicated that you have two boilers, which are subject to NSPS Part 60, Subpart Db. Since the boilers are capable of firing fuel oil, the regulation requires a continuous opacity monitor (COM). You requested the use of periodic visible emissions observations in lieu of the installation of a COM on the boilers. You stated that this is justified due to low annual capacity factor for fuel oil firing, and that the air permit limits the fuel oil sulfur content to 0.05 wt% sulfur.

On previous occasions, the U.S. Environmental Protection Agency (EPA) has approved similar requests based on the low annual capacity for fuel oil.

Based upon previous determinations and the information you submitted, EPA Region 6 approves the following alternative monitoring plan for opacity for the boilers at your facility when firing fuel oil in lieu of a COM.

1. The boiler shall be limited to an annual capacity factor for fuel oil of no more than 10%. The facility shall keep records of annual fuel oil consumption to verify that the annual capacity factor limit is not being exceeded.
2. At least once during each daylight shift when fuel oil is combusted, an observer certified in accordance with EPA Method 9 shall perform a 6-minute visible emissions observation. In order to obtain representative results, the oil consumption during the observation must be the maximum rate during the shift.



3. An observer certified in accordance with EPA Method 9 shall perform a 6-minute visible emission observation whenever the boiler reaches operating load after a cold startup with fuel oil.
4. If the average capacity for a 6-minute set of readings collected in accordance with Condition 2 or 3 exceeds 10%, the observer must collect two additional 6-minute sets of visible emissions.
5. Records of the date and time of visible emission observations, along with the results of each observation, must be maintained.
6. Thirty days after the end of each calendar quarter in which there are excess opacity emissions during fuel oil combustion, TECO must submit an excess emissions report to Texas Commission on Environmental Quality (TCEQ). If there are no opacity excess emissions during a calendar quarter, excess emissions reports may be submitted on a semi-annual basis. For reporting purposes, excess emissions are defined as any 6-minute period during which the average opacity exceeds 20%, and the excess emissions reports must indicate the total time of the visible emission observations during a calendar quarter and identify the duration of any excess emissions.
7. Excess emissions reports must also indicate the number of hours during which oil was burned during the quarter and this information must be used to verify that the annual capacity factor is less than 10%.

If the average annual capacity factor in a calendar year ever exceeds 10%, TECO will no longer qualify to use this alternative opacity monitoring plan and this approval will be invalid. TECO will then be put on a schedule for installing and certifying a COM for the boilers.

This approval of an AMP determination is based on the information submitted to EPA Region 6 on September 22, 2003. If any information is found that would reverse this determination, then it would become invalid and a new determination would be needed. If any fuel other than the fuels listed in this letter are fired in the unit, then this approval would become invalid and the facility would be required to keep records per 40 C.F.R. 60.48b.

If you have any questions concerning this determination, please contact Anupa Ahuja at (214) 665-2701.

Sincerely yours,



William K. Honker, P.E.  
Chief  
Air/Toxics and Inspection  
Coordination Branch

cc: Jeff Greif (MC 171)  
(TCEQ @ Austin, TX)

## Appendix A

Acronym List .....	57
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## Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM .....	actual cubic feet per minute
AMOC .....	alternate means of control
ARP .....	Acid Rain Program
ASTM .....	American Society of Testing and Materials
B/PA .....	Beaumont/Port Arthur (nonattainment area)
CAM .....	Compliance Assurance Monitoring
CD .....	control device
COMS .....	continuous opacity monitoring system
CVS .....	closed-vent system
D/FW .....	Dallas/Fort Worth (nonattainment area)
DR .....	Designated Representative
ELP .....	El Paso (nonattainment area)
EP .....	emission point
EPA .....	U.S. Environmental Protection Agency
EU .....	emission unit
FCAA Amendments .....	Federal Clean Air Act Amendments
FOP .....	federal operating permit
GF .....	grandfathered
gr/100 scf .....	grains per 100 standard cubic feet
HAP .....	hazardous air pollutant
H/G/B .....	Houston/Galveston/Brazoria (nonattainment area)
H <sub>2</sub> S .....	hydrogen sulfide
ID No. ....	identification number
lb/hr .....	pound(s) per hour
MMBtu/hr .....	Million British thermal units per hour
MRRT .....	monitoring, recordkeeping, reporting, and testing
NA .....	nonattainment
N/A .....	not applicable
NADB .....	National Allowance Data Base
NO <sub>x</sub> .....	nitrogen oxides
NSPS .....	New Source Performance Standard (40 CFR Part 60)
NSR .....	New Source Review
ORIS .....	Office of Regulatory Information Systems
Pb .....	lead
PBR .....	Permit By Rule
PM .....	particulate matter
ppmv .....	parts per million by volume
PSD .....	prevention of significant deterioration
RO .....	Responsible Official
SO <sub>2</sub> .....	sulfur dioxide
TCEQ .....	Texas Commission on Environmental Quality
TSP .....	total suspended particulate
TVP .....	true vapor pressure
U.S.C. ....	United States Code
VOC .....	volatile organic compound

**Appendix B**

<b>Major NSR Summary Table .....</b>	<b>59</b>
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Major NSR Summary Table

Permit Number: 46189, PSD-TX-1103, and N71					Issuance Date: June 6, 2011		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY **	Spec. Cond.	Spec. Cond.	Spec. Cond.
BLR-7	Boiler No. 7	NO <sub>x</sub>	5.45	-	8, 10	8, 11, 14	8
	(Firing Natural Gas)	CO	9.97	-	8, 10	8, 11, 14	8
		VOC	0.82	-	10	11, 14	
		SO <sub>2</sub>	0.09	-	10	11, 14	
		PM <sub>10</sub>	1.13	-	5, 10	5, 11, 14	
BLR-7	Boiler No. 7	NO <sub>x</sub>	10.80	-	8, 10	3, 8, 11, 14	8
	(Firing No. 2 Fuel Oil)	CO	5.40	-	8, 10	3, 8, 11, 14	8
		VOC	0.22	-	10	3, 11, 14	
		SO <sub>2</sub>	7.67	-	10	3, 11, 14	
		PM <sub>10</sub>	3.57	-	5, 10	3, 5, 11, 14	
BLR-7	Boiler No. 7	NO <sub>x</sub>	-	8.61	8, 10	8, 11, 14	8
	(Annual Allowables)	CO	-	43.67	8, 10	8, 11, 14	8
		VOC	-	3.58	10	11, 14	
		SO <sub>2</sub>	-	3.13	10	11, 14	
		PM <sub>10</sub>	-	5.84	5, 10	5, 11, 14	
BLR-8	Boiler No. 8	NO <sub>x</sub>	5.45	-	8, 10	8, 11, 14	8
	(Firing Natural Gas)	CO	9.97	-	8, 10	8, 11, 14	8
		VOC	0.82	-	10	11, 14	
		SO <sub>2</sub>	0.09	-	10	11, 14	
		PM <sub>10</sub>	1.13	-	5, 10	5, 11, 14	
BLR-8	Boiler No. 8	NO <sub>x</sub>	10.80	-	8, 10	3, 8, 11, 14	8
	(Firing No. 2 Fuel Oil)	CO	5.40	-	8, 10	3, 8, 11, 14	8
		VOC	0.22	-	10	3, 11, 14	
		SO <sub>2</sub>	7.67	-	10	3, 11, 14	
		PM <sub>10</sub>	3.57	-	5, 10	3, 5, 11, 14	

Major NSR Summary Table

Permit Number: 46189, PSD-TX-1103, and N71					Issuance Date: June 6, 2011		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY **	Spec. Cond.	Spec. Cond.	Spec. Cond.
BLR-8	Boiler No. 8	NO <sub>x</sub>	-	8.61	8, 10	8, 11, 14	8
	(Annual Allowables)	CO	-	43.67	8, 10	8, 11, 14	8
		VOC	-	3.58	10	11, 14	
		SO <sub>2</sub>	-	3.13	10	11, 14	
		PM <sub>10</sub>	-	5.84	5, 10	5, 11, 14	
BLR-2	Boiler No. 2	NO <sub>x</sub>	4.90	6.44	9, 10	9, 11, 14	
	(Natural Gas Only)	CO	12.06	52.91	9, 10	9, 11, 14	
		VOC	0.88	3.86	9, 10	9, 11, 14	
		SO <sub>2</sub>	0.10	0.42	9, 10	9, 11, 14	
		PM <sub>10</sub>	1.22	5.33	5, 9, 10	5, 9, 11, 14	
CHP-1	CHP Unit 1	NO <sub>x</sub>	10.71	40.22	6, 7, 8, 9, 11, 15, 16	6, 7, 8, 9, 11, 14, 15, 16	7, 8, 12, 15, 16
		NO <sub>x</sub> (5)	203.00	-	6, 7, 8, 9, 11, 15, 16, 19	6, 7, 8, 9, 11, 14, 15, 16, 19	7, 8, 12, 15, 16
		CO	64.25	234.51	6, 7, 8, 9, 11	6, 7, 8, 9, 11, 14	7, 8, 12
		CO (5)	923.00	-	6, 7, 8, 9, 11, 19	6, 7, 8, 9, 11, 14, 19	7, 8, 12
		VOC	7.79	(6)	7, 9, 11	7, 9, 11, 14	12
		VOC (5)	18.00	-	7, 9, 11, 19	7, 9, 11, 14, 19	12
		PM <sub>10</sub>	13.00	56.94	5, 7, 9, 11	5, 7, 9, 11, 14	12
		SO <sub>2</sub>	4.65	10.19	7, 9, 11, 15	7, 9, 11, 14, 15	12, 15
		H <sub>2</sub> SO <sub>4</sub>	0.71	1.56	7, 9, 11	7, 9, 11, 14	12
		NH <sub>3</sub>	11.31	34.68	7, 9, 11, 18	7, 9, 11, 14, 18	12
CHP-2	CHP Unit 2	NO <sub>x</sub>	10.71	40.22	6, 7, 8, 9, 11, 15, 16	6, 7, 8, 9, 11, 14, 15, 16	7, 8, 12, 15, 16
		NO <sub>x</sub> (5)	203.00	-	6, 7, 8, 9, 11, 15, 16, 19	6, 7, 8, 9, 11, 14, 15, 16, 19	7, 8, 12, 15, 16
		CO	64.25	234.51	6, 7, 8, 9, 11	6, 7, 8, 9, 11, 14	7, 8, 12
		CO (5)	923.00	-	6, 7, 8, 9, 11, 19	6, 7, 8, 9, 11, 14, 19	7, 8, 12
		VOC	7.79	(6)	7, 9, 11	7, 9, 11, 14	12
		VOC (5)	18.00	-	7, 9, 11, 19	7, 9, 11, 14, 19	12
		PM <sub>10</sub>	13.00	56.94	5, 7, 9, 11	5, 7, 9, 11, 14	12

Major NSR Summary Table

Permit Number: 46189, PSD-TX-1103, and N71					Issuance Date: June 6, 2011		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY **	Spec. Cond.	Spec. Cond.	Spec. Cond.
		SO <sub>2</sub>	4.65	10.19	7, 9, 11, 15	7, 9, 11, 14, 15	12, 15
		H <sub>2</sub> SO <sub>4</sub>	0.71	1.56	7, 9, 11	7, 9, 11, 14	12
		NH <sub>3</sub>	11.31	34.68	7, 9, 11, 18	7, 9, 11, 14, 18	12
FUGNGCHP	CHP Natural Gas Fugitives (4)	VOC	0.15	0.64	10	14	
FUGNH3	Ammonia Fugitives (4)	NH <sub>3</sub>	1.26	5.50	10	11, 14	
CTF501-CTF508	West Cooling Tower 2	PM <sub>10</sub>	2.00	8.77	5, 10	5, 14	
CTF601-CTF610	Chiller Building Cooling Tower	PM <sub>10</sub>	4.00	17.53	5, 10	5, 14	

## Footnotes:

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.  
 (2) Specific point source name. For fugitive sources, use area name or fugitive source name.  
 (3) NOx - total oxides of nitrogen  
 CO - carbon monoxide  
 VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1  
 SO<sub>2</sub> - sulfur dioxide  
 PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter  
 H<sub>2</sub>SO<sub>4</sub> - sulfuric acid mist  
 NH<sub>3</sub> - ammonia  
 (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.  
 (5) Start-up and Shutdown emissions.  
 (6) VOC emissions from CHP-1 and CHP-2 are limited to a combined total of 17.0 tpy.

\* Emission rates are based on the firing of natural gas and No. 2 fuel oil.  
 The facilities are limited by the following maximum operating schedule when firing natural gas: 8,760 Hrs/year, and BLR-7 and BLR-8 are limited by the following maximum operating schedule when firing No. 2 fuel oil: 720 Hrs/year  
 \*\* Compliance with annual emission limits is based on a rolling 12-month period.

Bryan W. Shaw, Ph.D., *Chairman*  
Buddy Garcia, *Commissioner*  
Carlos Rubinstein, *Commissioner*  
Mark R. Vickery, P.G., *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

June 6, 2011

MR E BRUCE TURNER, PE  
VICE PRESIDENT ENGINEERING  
TEXAS MEDICAL CENTER CENTRAL HEATING AND COOLING SERVICES  
CORPORATION  
1615 BRAESWOOD BLVD  
HOUSTON TX 77030-3903

Re: Permit Renewal  
Permit Number: 46189  
Central Plant  
Houston, Harris County  
Regulated Entity Number: RN100210798  
Customer Reference Number: CN602530784  
Account Number: HG-0988-A  
Associated Permit Numbers: N71 and PSDTX1103

Dear Mr. Turner:

This is in response to your application Form PI-1R (General Application for Air Permit Renewals) concerning the proposed renewal of Permit Number 46189. Also, this will acknowledge that your application for the above-referenced renewal is technically complete as of May 24, 2011.

As indicated in Title 30 Texas Administrative Code § 116.314(a) [30 TAC § 116.314(a)], and based on our review, Permit Number 46189 is hereby renewed. Since you certified there were no changes to your existing permit, it is renewed as written and will be in effect for ten years from the date of approval (Commission's final decision). Please attach this letter to your permit. We appreciate your careful review of the special conditions of the permit and assuring that all requirements are consistently met.

Also, you are reminded that acceptance of this permit constitutes acknowledgment and agreement that you will comply with all rules, regulations, and orders of the commission issued in conformity with the Texas Clean Air Act and the conditions precedent to the granting of the permit. If more than one state rule, regulation, or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit.



Mr. E Bruce Turner, PE  
Page 2  
June 6, 2011

Re: Permit Number: 46189

No planned maintenance, startup, and shutdown emissions have been reviewed or represented in this application and none are authorized by this permit.

As of July 1, 2008, all analytical data generated by a mobile or stationary laboratory in support of compliance with air permits must be obtained from a NELAC (National Environmental Laboratory Accreditation Conference) accredited laboratory under the Texas Laboratory Accreditation Program or meet one of several exemptions. Specific information concerning which laboratories must be accredited and which are exempt may be found in 30 TAC § 25.4 and § 25.6.

For additional information regarding the laboratory accreditation program and a list of accredited laboratories and their fields of accreditation, please see the following Web site:

[www.tceq.texas.gov/compliance/compliance\\_support/qa/env\\_lab\\_accreditation.html](http://www.tceq.texas.gov/compliance/compliance_support/qa/env_lab_accreditation.html)

For questions regarding the accreditation program, you may contact the Texas Laboratory Accreditation Program at (512) 239-3754 or by e-mail at [labprgms@tceq.texas.gov](mailto:labprgms@tceq.texas.gov).

You may file a **motion to overturn** with the Chief Clerk. A motion to overturn is a request for the commission to review the executive director's decision. Any motion must explain why the commission should review the executive director's decision. According to 30 TAC § 50.139, an action by the executive director is not affected by a motion to overturn filed under this section unless expressly ordered by the commission.

A motion to overturn must be received by the Chief Clerk within 23 days after the date of this letter. An original and 11 copies of a motion must be filed with the Chief Clerk in person, or by mail to the Chief Clerk's address on the attached mailing list. On the same day the motion is transmitted to the Chief Clerk, please provide copies to the applicant, the executive director's attorney, and the Public Interest Counsel at the addresses listed on the attached mailing list. If a motion to overturn is not acted on by the commission within 45 days after the date of this letter, then the motion shall be deemed overruled.

You may also request **judicial review** of the executive director's approval. According to Texas Health and Safety Code § 382.032, a person affected by the executive director's approval must file a petition appealing the executive director's approval in Travis County district court within 30 days after the effective date of the approval. Even if you request judicial review, you still must exhaust your administrative remedies, which includes filing a motion to overturn in accordance with the previous paragraphs.

Thank you for your cooperation in sending us the information necessary to evaluate your operations and for your commitment to air pollution control. If you need further information or

Mr. E Bruce Turner, PE  
Page 3  
June 6, 2011

Re: Permit Number: 46189

have any questions, please contact Mr. Alejandro Cavazos at (512) 239-4987 or write to the Texas Commission on Environmental Quality, Office of Permitting and Registration, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under authority delegated by the Executive Director of the TCEQ.

Sincerely,

Steve Hagle, P.E., Director  
Air Permits Division  
Office of Permitting and Registration  
Texas Commission on Environmental Quality

SH/AC/

cc: Bureau Chief of Air Quality Control, Health and Human Services Department, City of Houston, Houston  
Director, Environmental Public Health Division, Harris County Public Health and Environmental Services, Pasadena  
Air Section Manager, Region 12 - Houston  
Air Permits Section Chief, New Source Review, Section (6PD-R), U.S. Environmental Protection Agency, Region 6, Dallas

Project Number: 164045

## SPECIAL CONDITIONS

Permit Numbers 46189, PSD-TX-1103, and N71

### EMISSION STANDARDS AND FUEL SPECIFICATIONS

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission limits and other conditions specified in the attached table. The annual rates are based on any consecutive 12-month period.  
  
If one emission rate limitation is more stringent than another emission rate limitation, then the more stringent limitation shall govern and be the standard by which compliance will be demonstrated.
2. Fuel for Boilers Nos. 2, 7, and 8 (Emission Point Nos. [EPNs] BLR-7 and BLR-8) shall be limited to pipeline-quality, sweet natural gas containing no more than 0.25 grain of hydrogen sulfide and 5 grains of total sulfur per 100 dscf. Fuel for Turbines (EPNs CHP-1 and CHP-2) shall be limited to pipeline-quality, sweet natural gas containing no more than 1 grain of total sulfur per 100 dscf on an annual average. Use of any other fuel requires an amendment to this permit, except as allowed under Special Condition No. 3. **(7/08)**
3. Boilers 7 and 8 will be capable of firing low sulfur No. 2 fuel oil as back up fuel. The total hours of operation over any consecutive 12-month period shall not exceed 720 hours on No. 2 fuel oil. No. 2 fuel oil will contain no more than 0.05 percent sulfur by weight.
4. The firing rate, determined by the fuel flow at the higher heating value, shall not exceed:
  - A. 151.26 MMBtu/hr per boiler, for Boiler Nos. 7 and 8, and
  - B. 163.23 MMBtu/hr for Boiler No. 2. **(8/03)**
  - C. 291 MMBtu/hr for each duct burner in EPNs CHP-1 and CHP-2 **(7/08)**
5. Opacity of emissions from all sources authorized under this permit shall not exceed 5 percent averaged over a six-minute period. **(8/03)**
6. The concentration of nitrogen oxides (NO<sub>x</sub>) in the stack gases from EPNs CHP-1 and CHP-2 each shall not exceed the following
  - A. During turbine operation less than 80 percent of base load, a three-hour rolling average of 3.5 parts per million by volume on a dry basis (ppmvd) corrected to 15 percent oxygen (O<sub>2</sub>)

## SPECIAL CONDITIONS

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- B. During turbine operation greater than 80 percent of base load, a three-hour rolling average of 2.0 parts per million by volume on a dry basis (ppmvd) corrected to 15 percent oxygen (O<sub>2</sub>)

These concentration limits apply regardless of duct burner firing rate and exclude start-up and shutdown periods.

During fresh air firing of the duct burners, the emission rate of NO<sub>x</sub> shall not exceed 0.01 lb/MMBtu based on the higher heating value of the fuel and a three hour block average. The CO emissions shall not exceed the maximum allowable emission rate table.

Planned start-up and shutdown events are authorized for EPNs CHP-1 and CHP-2 through this permit. (7/08)

## INITIAL DETERMINATION OF COMPLIANCE

7. The holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere by EPNs CHP-1 and CHP-2. Initial compliance with the permit opacity limit of Special Condition No. 5 shall be demonstrated on the basis of compliance with Title 40 Code of Federal Regulations § 60.11(b) (40 CFR § 60.11[b]). Sampling must be conducted in accordance with appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with the U.S. Environmental Protection Agency (EPA) Reference Method 9 for opacity, Reference Method 10 for carbon monoxide (CO), Reference Method 7E for nitrogen oxides (NO<sub>x</sub>), and Reference Method 3 for oxygen (O<sub>2</sub>) or equivalent methods.

Fuel sampling using the methods and procedures of 40 CFR § 60.4415(a)(1) may be conducted in lieu of stack sampling for SO<sub>2</sub>. If fuel sampling is used, compliance with New Source Performance Standards (NSPS), Subpart KKKK SO<sub>2</sub> limits shall be based on 100 percent conversion of the sulfur in the fuel to SO<sub>2</sub>. Any deviations from those procedures must be approved by the Executive Director of the TCEQ prior to sampling. The TCEQ Executive Director or designated representative shall be afforded the opportunity to observe all such sampling. (7/08)

The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operation at his expense.

## SPECIAL CONDITIONS

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- A. The Texas Commission on Environmental Quality (TCEQ) Houston Regional Office shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting. The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.
- (6) Proposed method of demonstrating compliance with 40 CFR § 60.48b.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports.

A written proposed description of any deviation from sampling procedures specified in permit conditions or TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director or the Director of the TCEQ Compliance Support Division in Austin shall approve or disapprove of any deviation from specified sampling procedures.

Requests to waive testing for any pollutant specified in Special Condition No. 7B shall be submitted to the TCEQ Office of Permitting, Remediation, and Registration, Air Permits Division. Test waivers and alternate or equivalent procedure proposals for New Source Performance Standards testing which must have EPA approval shall be submitted to the TCEQ Compliance Support Division in Austin.

- B. Air contaminants and diluents from EPNs CHP-1 and CHP-2 to be sampled and analyzed include (but are not limited to) NO<sub>x</sub>, CO, volatile organic compounds, SO<sub>2</sub>, NH<sub>3</sub>, opacity, and O<sub>2</sub>. [As noted above, fuel sampling using the methods and procedures of 40 CFR § 60.4415(a)(1) may be conducted in lieu of stack sampling for SO<sub>2</sub>].

EPNs CHP-1 and CHP-2 shall be tested between 20 and 80 percent of base load and between 80 and 100 percent of base load for the atmospheric conditions which exist during testing. Each tested turbine load shall be identified in the sampling report. The permit holder shall present at the pretest meeting the manner in which stack sampling will be executed in order to demonstrate compliance with emission standards found in 40 CFR Part 60, Subpart KKKK. During the test for a base load between 80 and 100 percent, the duct burners shall

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also fire at a minimum of 80 percent of full fire. If the turbine and/or duct burners cannot achieve a minimum of 80% load during the initial performance test, the initial performance test shall be conducted at the highest load achievable and a subsequent performance test shall be required within 90 days after the turbine and/or duct burner exceeds the load reached during the initial performance test by more than 10%.

Also, the case of fresh air firing of the duct burners shall be tested by firing only the duct burners (turbine is shutdown) at a minimum of 80 percent of full fire. The contaminants and diluents to be sampled and analyzed include (but are not limited to) NO<sub>x</sub>, CO, volatile organic compounds, NH<sub>3</sub>, opacity, and O<sub>2</sub>. **(7/08)**

- C. For EPNs CHP-1 and CHP-2, BACT (LAER for NO<sub>x</sub>) shall be demonstrated by complying with Special Condition No. 6 for NO<sub>x</sub> and no more than 35 ppmvd corrected to 15% O<sub>2</sub> and based on a one hour block average for CO. **(7/08)**
- D. Sampling shall occur within 60 days after the facilities achieve maximum production but not later than 180 days after initial start-up of the facilities and at such other times as may be required by the Executive Director of the TCEQ. Requests for additional time to perform stack sampling shall be submitted to the TCEQ Regional Office. Additional time to comply with the requirements of 40 CFR Part 60 cannot be granted.
- E. Three copies of the final sampling report shall be forwarded to the TCEQ within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions of Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the TCEQ Houston Regional Office.

One copy to the Office of Permitting, Remediation, and Registration,  
Air Permits Division in Austin.

One copy to the appropriate local program

## CONTINUOUS DETERMINATION OF COMPLIANCE

- 8. The holder of this permit shall install, calibrate, and maintain either a continuous emission monitoring system (CEMS) or a predictive emission monitoring system (PEMS) to measure and record the in-stack concentration of NO<sub>x</sub> from Boiler Nos. 7 and 8 (EPNs BLR-7 and BLR-8). **(8/03)**

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For EPNs CHP-1 and CHP-2, the holder of this permit shall install, calibrate, and maintain continuous emission monitoring systems (CEMS) to measure and record the in-stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub>. **(7/08)**

### REQUIREMENTS FOR CEMS

- A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the TCEQ Office of Permitting, Remediation, and Registration, Air Permits Division in Austin for requirements to be met.
- B. The system shall be zeroed and spanned daily, and corrective action taken when the 24-hour span drift exceeds two times the amounts specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B, or as specified by the TCEQ if not specified in Appendix B.

Each monitor shall be quality-assured at least quarterly using Cylinder Gas Audits (CGA) in accordance with 40 CFR Part 60, Appendix F, Procedure 1, § 5.1.2, with the following exception for BLR-7, BLR-8, CHP-1, and CHP-2: a relative accuracy test audit (RATA) is not required once every four quarters (i.e., four successive quarterly CGA may be conducted). An equivalent quality assurance method approved by the TCEQ may also be used. Successive quarterly audits shall occur no closer than two months. **(7/08)**

All CGA exceedances of  $\pm 15$  percent accuracy and any CEMS downtime shall be reported to the appropriate TCEQ Regional Director, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.

- C. The monitoring data shall be reduced to hourly average concentrations at least once everyday, using a minimum of four equally-spaced data points from each one-hour period. The individual average concentrations shall be reduced to units of the permit allowable emission rate in lbs/hr on a three-hour average at least once everyday and cumulative TPY on a 12-month rolling average at least once every month. **(8/03)**

## SPECIAL CONDITIONS

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- D. All monitoring data and quality-assurance data shall be maintained by the source for a period of two years and shall be made available to the TCEQ Executive Director or designated representative upon request. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit.
- E. The appropriate TCEQ Regional Office shall be notified at least 30 days prior to any required RATA in order to provide them the opportunity to observe the testing.

## REQUIREMENTS FOR PEMS FOR BLR-7 AND BLR-8 (8/03)

- A. A PEMS may be used for demonstrating continuous compliance if it can be proven to have the same or better accuracy, precision, reliability, accessibility, and timeliness as that provided by a hardware CEMS. All PEMS shall be subject to the approval of the Executive Director of the TCEQ. Owners or operators must petition the TCEQ Executive Director for approval to use PEMS. The petition must include results of tests conducted beforehand to demonstrate equivalent accuracy and precision of PEMS to that of hardware CEMS. Demonstrating equivalency of PEMS to CEMS shall be met by instantaneously comparing data collected by PEMS with that collected by a certified hardware CEMS or an EPA reference method. For a PEMS replacing a CEMS, both systems shall remain in place for at least an operating quarter collecting valid information before the CEMS is removed.
- B. For any unit at which the PEMS is installed, PEMS initial certification by the TCEQ shall occur while the unit is firing its primary fuel. The owner or operator shall:
  - (1) Conduct relative accuracy testing for NO<sub>x</sub>, O<sub>2</sub>, or carbon dioxide (CO<sub>2</sub>), and CO per 40 CFR Part 60, Appendix B, Performance Specifications 2, 3, and 4, respectively, at low, medium, and high levels of the most significant operating parameter affecting NO<sub>x</sub> emissions.
  - (2) Conduct statistical test analysis at low, medium, and high levels of the most significant operating parameter affecting NO<sub>x</sub> emissions. A minimum of 30 successive paired data points which are either 15-minute averages, 20-minute averages, or hourly averages must be collected at each tested level before a reliable statistical test can be performed. Data collection must be continuous at all times except when calibration of the



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reference method must be conducted for the purpose of collecting data for RATA.

The following three tests must be conducted to demonstrate precision:

- a. A T-test for bias per Appendix A, 40 CFR Part 75, § 7.6. The test shall be conducted using all paired data points collected at all three tested levels.
  - b. An F-test per 40 CFR § 75.41(c)(1). The F-test must be conducted separately at the three tested levels.
  - c. A correlation analysis per 40 CFR § 75.41(c)(2). Calculation of the correlation co-efficient (Equation 27) shall be performed using all paired data points collected at all three tested levels.
- (3) For either NO<sub>x</sub> or CO and for the purpose of conducting an F-test, if the standard deviation (SD) of the reference method is less than either 3 percent of the span or 5 ppm, use a reference Method SD of the greater of 5 ppm or 3 percent of span.
  - (4) For diluent CO<sub>2</sub> or O<sub>2</sub> and for the purpose of conducting an F-test, if the SD of the reference method is less than 3 percent of span, use a reference method SD of 3 percent of span.
  - (5) For either NO<sub>x</sub> or CO and at any one tested level, if the mean value of the reference is less than either 10 ppm or 5 percent of the standard, all statistical tests are waived for that emission parameter at that specific tested level.
  - (6) For either O<sub>2</sub> or CO<sub>2</sub> and at any one tested level, if the mean value of the reference method is less than 3 percent of span, all the statistical tests are waived for that diluent parameter at that specific tested level.
- C. The monitoring data shall be reduced to hourly average concentrations at least once every day, using a minimum of four equally-spaced data points from each one-hour period. The individual average concentrations shall be reduced to units of the permit allowable emission rate in lbs/hr on a three-hour average at least once every day and cumulative TPY on a 12-month rolling average at least once every month. **(8/03)**

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- D. All monitoring data and quality-assurance data shall be maintained by the permit holder for a period of two years and shall be made available to the Executive Director of the TCEQ or designated representative upon request.
- E. Any PEMS downtime shall be reported to the appropriate TCEQ Regional Director, and necessary corrective action shall be taken. Owners or operators shall demonstrate that all missing data can be accounted for in accordance with the applicable missing data procedures of 40 CFR Part 75, Subpart D. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.
- F. The appropriate TCEQ Regional Office shall be notified at least 30 days prior to each annual RATA in order to provide them the opportunity to observe the testing.
- G. The owner or operator shall perform daily sensor validation. The owner or operator shall develop and implement plans that will ensure proper functioning of the monitoring systems, ensure proper accuracy and calibration of all operational parameters that affect emissions and serve as input to the predictive monitoring system, and ensure continuous operation within the certified operating range.
- H. In accordance with the procedure of § 2.3.1, Appendix B of 40 CFR Part 60, a RATA must be performed every six months for each unit while firing its primary fuel. A RATA may be performed annually if the relative accuracy of the previous audit is 7.5 percent or less.
- I. For each of the three successive quarters following the quarter in which initial certification was conducted, RATA and statistical testing must be conducted for at least one unit in a category of units in accordance with the procedures outlined for initial certification under Section B.
- J. Any RATA exceeding 20 percent or statistical test exceeding the applicable standard shall be reported to the appropriate TCEQ Regional Director, and necessary corrective action shall be taken.
- K. When an alternative fuel is fired in a unit, PEMS must be re-certified in accordance with the certification procedures outlined for initial certification under Section B. Owners or operators may justify to the satisfaction of the TCEQ Executive Director that slight changes in fuel composition do not constitute an alternative fuel. No additional recertification procedures are required if the unit

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meets the current monitoring requirements when switching back to the normal fuel from an alternate fuel.

- L. The system is required to provide valid emission predictions for at least 95 percent of the time that the unit being monitored is operated. The following rules for tuning without recertification shall be followed:

- (1) The model did not change fundamentally.
- (2) The model continues to operate within the initially certified operating ranges.

Otherwise, the system must be recertified. Any tuning must be documented, and the records must be made available during any future inspection.

- M. All owners/operators shall develop a quality-assurance plan/manual that insures continuous and reliable performance of the PEMS. As part of the plan, owners/operators shall recommend a frequency for calibrating each sensor whose readout serves as an input to the model. All sensors, at a minimum, shall be calibrated as often as recommended by the manufacturer.

9. Continuous monitoring of emissions from the Boiler No. 2 shall be conducted in accordance with 30 TAC § 117.213 (Continuous Demonstration of Compliance). **(8/03)**
10. At the request of the TCEQ Executive Director, the holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

## RECORDKEEPING REQUIREMENTS

11. In order to determine compliance with the emission limits and other conditions of this permit and representations made in the permit application, the holder of this permit must keep and maintain the following records:
  - A. Hourly emission rates of NO<sub>x</sub> from EPNs BLR-7 and BLR-8 shall be based upon a three-hour average of CEMS or PEMS data. **(8/03)**

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- B. Hourly emission rates of NO<sub>x</sub> from EPN BLR-2 and hourly emission rates of CO, volatile organic compound (VOC), sulfur dioxide (SO<sub>2</sub>), and particulate matter (PM) from EPNs BLR-2, BLR-7, and BLR-8 shall be based upon monthly fuel use and operating hours. **(8/03)**
- C. Annual emission rates shall be based on a rolling 12-month period.
- D. For natural gas and No. 2 fuel oil, records of dates of operation and fuel use shall be kept.
- E. For No. 2 fuel oil, records of the sulfur content of the fuel shall be kept.
- F. Outage dates and description of maintenance and repairs for EPNs BLR-2, BLR-7, and BLR-8. **(8/03)**

G-K apply to EPNs CHP-1 and CHP-2

- G. The NO<sub>x</sub>, CO, and O<sub>2</sub>, CEMS emissions data to demonstrate compliance with the emission rates listed in the MAERT. The data shall be reduced to a clear demonstration with the limits in Special Condition No. 6 and the MAERT on a monthly basis at a minimum.
- H. Raw data files of all CEMS data including calibration checks and adjustments and maintenance performed on these systems.
- I. Records of the hours of operation of the duct burners in fresh air firing mode.
- J. Records of fuel sampling conducted pursuant to 40 CFR Part 60, Subpart KKKK.
- K. Records of NH<sub>3</sub> emissions sampling and calculations pursuant to Special Condition No. 18.

These records must be kept on-site on a five-year rolling retention basis from the date the data is obtained and made available to the TCEQ Executive Director or any local air pollution control agency having jurisdiction upon request. **(7/08)**

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### REPORTING

12. The holder of this permit shall submit to the TCEQ Houston Regional Office and the Air Enforcement Branch of the EPA in Dallas reports as described in 40 CFR § 60.7 for EPNs CHP-1 and CHP-2.
13. The emission limits in the maximum allowable rate table do not apply during periods of start-up or shutdown for EPNs BLR-2, BLR-7, and BLR-8.
14. A copy of this permit shall be kept at the plant site and made available at the request of personnel from the TCEQ or any air pollution control agency with jurisdiction.

### FEDERAL APPLICABILITY

15. The Combustion Turbines and Duct Burners are subject to the applicable requirements of Subpart KKKK titled Standards of Performance for Stationary Combustion Turbines.
16. Total offsets in the amount of 104.6 TPY, based on 80.44 TPY of NO<sub>x</sub> authorized and an offset ratio of 1.3:1, are necessary for EPNs CHP-1 and CHP-2.

The permittee will satisfy the 1:1 portion of the offset through participation in the Mass Emission Cap and Trade (MECT) Program, and the 0.3 portion shall either be emission reduction credits (ERCs), discrete emission reduction credits (DERC)s, or obtained from MECT. If the permittee chooses to use MECT allowances for the 0.3 portion of the offset, the MECT allowances shall be permanently retired prior to start of operation of the source.

For the 1:1 portion of the offset, at the beginning of the Mass Emissions Cap and Trade (MECT) compliance period in which a source will commence operation and at the beginning of each MECT compliance period after that, the permittee must have sufficient MECT allowances to cover the potential to emit of that source.

### NH<sub>3</sub> MONITORING

17. Ammonia in the stacks of EPNs CHP-1 and CHP-2 is limited to 10 ppmvd on a one hour average and 7 ppmvd on an annual average, at 15% oxygen.

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18. The  $\text{NH}_3$  concentration in Exhaust Stack EPNs CHP-1 and CHP-2 shall be tested or calculated according to one of the methods listed below and shall be tested or calculated according to frequency listed below. Testing for  $\text{NH}_3$  slip is only required on days when the SCR unit is in operation.
  - A. The holder of this permit may install, calibrate, maintain, and operate a CEMS to measure and record the concentrations of  $\text{NH}_3$ . The  $\text{NH}_3$  concentrations shall be corrected and reported in accordance with Special Condition No. 17.
  - B. As an approved alternative, the  $\text{NH}_3$  slip may be measured using a sorbent or stain tube device specific for  $\text{NH}_3$  measurement in the 5 to 10 ppm range. The frequency of sorbent or stain tube testing shall be daily for the first 60 days of operation, after which, the frequency may be reduced to weekly testing if operating procedures have been developed to prevent excess amounts of  $\text{NH}_3$  from being introduced in the SCR unit and when operation of the SCR unit has been proven successful with regard to controlling  $\text{NH}_3$  slip. Daily sorbent or stain tube testing shall resume when the catalyst is within 30 days of its useful life expectancy. These results shall be recorded and used to determine compliance with Special Condition No. 17.
  - C. As an approved alternative to sorbent or stain tube testing or an  $\text{NH}_3$  CEMS, the permit holder may install and operate a second  $\text{NO}_x$  CEMS probe located upstream of the SCR, which may be used in association with the SCR efficiency and  $\text{NH}_3$  injection rate to estimate  $\text{NH}_3$  slip. This condition shall not be construed to set a minimum  $\text{NO}_x$  reduction efficiency on the SCR unit. These results shall be recorded and used to determine compliance with Special Condition No. 17.
  - D. As an approved alternative to sorbent or stain tube testing,  $\text{NH}_3$  CEMS, or a second  $\text{NO}_x$  CEMS, the permit holder may install and operate a dual stream system of  $\text{NO}_x$  CEMS at the exit of the SCR. One of the exhaust streams would be routed, in an unconverted state, to one  $\text{NO}_x$  CEMS, and the other exhaust stream would be routed through a  $\text{NH}_3$  converter to convert  $\text{NH}_3$  to  $\text{NO}_x$  and then to a second  $\text{NO}_x$  CEMS. The  $\text{NH}_3$  slip concentration shall be calculated from the delta between the two  $\text{NO}_x$  CEMS readings (converted and unconverted). These results shall be recorded and used to determine compliance with Special Condition No. 17.
  - E. Any other method used for measuring  $\text{NH}_3$  slip shall require prior approval from the TCEQ Executive Director or his designee.

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### START-UP AND SHUTDOWN EMISSIONS

19. The emissions from start-up and shutdown (SS) activities are reflected in the maximum allowable emission rates table (MAERT). These emissions will be minimized by the following:
  - A. Facility and air pollution control equipment will be operated in a manner consistent with good practices for minimizing emissions;
  - B. The frequency and duration of operation in a SS mode will be minimized and the applicable emissions monitoring systems will be kept in operation.
  - C. Start-up/shutdown periods for the GE LM 6000 Gas Turbines shall not exceed two hours in duration.
  - D. Start-up and shutdown activities are authorized provided that the NO<sub>x</sub> and CO emission rates in pounds per hour do not exceed those specified in the MAERT.

Dated July 29, 2008

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
BLR-7	Boiler No. 7 (Firing Natural Gas)	NO <sub>x</sub>	5.45	-
		CO	9.97	-
		VOC	0.82	-
		SO <sub>2</sub>	0.09	-
		PM <sub>10</sub>	1.13	-
	Boiler No. 7 (Firing No. 2 Fuel Oil)	NO <sub>x</sub>	10.80	-
		CO	5.40	-
		VOC	0.22	-
		SO <sub>2</sub>	7.67	-
		PM <sub>10</sub>	3.57	-
	Boiler No. 7 (Annual Allowables)	NO <sub>x</sub>	-	8.61
		CO	-	43.67
		VOC	-	3.58
		SO <sub>2</sub>	-	3.13
		PM <sub>10</sub>	-	5.84
BLR-8	Boiler No. 8 (Firing Natural Gas)	NO <sub>x</sub>	5.45	-
		CO	9.97	-
		VOC	0.82	-
		SO <sub>2</sub>	0.09	-
		PM <sub>10</sub>	1.13	-
	Boiler No. 8 (Firing No. 2 Fuel Oil)	NO <sub>x</sub>	10.80	-
		CO	5.40	-
		VOC	0.22	-
		SO <sub>2</sub>	7.67	-
		PM <sub>10</sub>	3.57	-
	Boiler No. 8 (Annual Allowables)	NO <sub>x</sub>	-	8.61
		CO	-	43.67
		VOC	-	3.58
		SO <sub>2</sub>	-	3.13
		PM <sub>10</sub>	-	5.84
			-	



EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY**
BLR-2	Boiler No. 2 (Natural Gas Only)	NO <sub>x</sub>	4.90	6.44
		CO	12.06	52.91
		VOC	0.88	3.86
		SO <sub>2</sub>	0.10	0.42
		PM <sub>10</sub>	1.22	5.33
CHP-1	CHP Unit 1	NO <sub>x</sub>	10.71	40.22
		NO <sub>x</sub> (5)	203.00	-
		CO	64.25	234.51
		CO (5)	923.00	-
		VOC	7.79	(6)
		VOC (5)	18.00	
		PM <sub>10</sub>	13.00	56.94
		SO <sub>2</sub>	4.65	10.19
		H <sub>2</sub> SO <sub>4</sub>	0.71	1.56
		NH <sub>3</sub>	11.31	34.68
CHP-2	CHP Unit 2	NO <sub>x</sub>	10.71	40.22
		NO <sub>x</sub> (5)	203.00	-
		CO	64.25	234.51
		CO (5)	923.00	-
		VOC	7.79	(6)
		VOC (5)	18.00	
		PM <sub>10</sub>	13.00	56.94
		SO <sub>2</sub>	4.65	10.19
		H <sub>2</sub> SO <sub>4</sub>	0.71	1.56
		NH <sub>3</sub>	11.31	34.68
FUGNGCHP	CHP Natural Gas Fugitives (4)	VOC	0.15	0.64
FUGNH3	Ammonia Fugitives (4)	NH <sub>3</sub>	1.26	5.50
CTF501- CTF508	West Cooling Tower 2	PM <sub>10</sub>	2.00	8.77
CTF601- CTF610	Chiller Building Cooling Tower	PM <sub>10</sub>	4.00	17.53

### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- (1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an area name or fugitive source name.
- (3)  $\text{NO}_x$  - total oxides of nitrogen  
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1  
 $\text{SO}_2$  - sulfur dioxide  
 $\text{PM}_{10}$  - particulate matter equal to or less than 10 microns in diameter  
CO - carbon monoxide  
 $\text{H}_2\text{SO}_4$  - sulfuric acid mist  
 $\text{NH}_3$  - ammonia
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Start-up and Shutdown emissions
- (6) VOC emissions from CHP-1 and CHP-2 are limited to a combined total of 17.0 tpy

\* Emission rates are based on the firing of natural gas and No. 2 fuel oil.

The facilities are limited by the following maximum operating schedule when firing natural gas:

8,760 Hrs/year, and

BLR-7 and BLR-8 are limited by the following maximum operating schedule when firing No. 2 fuel oil:

720 Hrs/year

\*\* Compliance with annual emission limits is based on a rolling 12-month period.

Date July 29, 2008